Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
BROADBAND STUDY CONDUCTED BY THE BERKMAN CENTER FOR INTERNET AND SOCITY	)	GN Docket Nos. 09-47, 09-51, 09-137

COMMENTS – NBP PUBLIC NOTICE # 13

In accordance with the FCC's October 14th Public Notice,[1] Nippon Telegraph and Telephone Corporation ("NTT") comments on the draft study by Harvard University's Berkman Center for Internet and Society, entitled *Next Generation Connectivity: A review of broadband Internet transitions and policy from around the world.*[2]

NTT was incorporated in 1985 after the privatization of Nippon Telegraph and Telephone Public Corporation under the liberalization policy for Japan's telecommunications industry. After NTT's privatization, the competition with newly entered telecommunications carriers in terms of telephone charges and services became increasingly fierce, especially in the long-distance telephone service market. In response, NTT drastically reduced inter-city dialing charges, and strove to diversify telephone and other services.

NTT also sought to digitalize and increase the sophistication of its communications networks so as to enhance communications among many different media, including not only voice, but also text and video. To this end, NTT clarified the specific directions of its businesses

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[1] Comments Sought on Broadband Study Conducted by the Berkman Center for Internet and Society, NPB Public Notice #13, DA 09-2217 (Oct. 14, 2009).

[2] Available at http://www.fcc.gov/stage/pdf/Berkman_Center_Broadband_Study_13Oct09.pdf (Draft Oct. 2009) [hereinafter "Berkman Center draft study"].

through the announcement of vision statements, including the INS (Information Network Systems) Concept in 1985, the VI&P (Visual, Intelligent, and Personal Communications Services) Concept in 1990, and the Basic Concept for the Coming Multimedia Age in 1994. In line with such a series of endeavors, to meet growing needs for the Internet in Japan, the "INS Net" integrated services digital network (ISDN), the "OCN" Internet connectivity service and other services were developed and launched commercially to increase service penetration. In the mobile communications field, NTT DOCOMO, which separated from NTT in 1992, has actively implemented measures such as expanding service areas and enhancing quality.

These measures helped to spark the subsequent explosive growth in mobile phone penetration in Japan and the accompanying rapid expansion in the nation's mobile phone market. In the data communications field, through NTT DATA, which was separated from NTT in 1988, a comprehensive range of services, from information system strategy solutions to systems implementation, operation and management services, was provided to address shifting customer IT-related needs accompanying the increasing sophistication of communications networks and other factors.

In 1999, NTT was again reorganized, becoming a holding company of three operating companies: the two regional carriers NTT East and NTT West and the long distance and international communications arm NTT Communications. With the inclusion of NTT DOCOMO, NTT DATA, and other companies, today's NTT Group took shape.[3]

Around the time of the reorganization of NTT, Japan's information and telecommunications market began to see rapid acceleration in the migration from telephone to IP

[3] Although formerly owned by the Government of Japan ("GOJ"), NTT now is an independent shareholder-owned company; the GOJ today is a minority shareholder with an approximately 33 percent non-controlling interest *See* NTT Stock Information, Classification of Shareholders Chart (as of Mar. 31, 2009), *available at* http://www.ntt.co.jp/ir/shares_e/digest.html (last visited Oct. 30, 2009).

networks, in line with changes in technologies and shifting customer needs from voice to data communications. In response, in 1999, NTT DOCOMO began providing the "*i-mode*" service, which enables customers to use their mobile phones to access the Internet for email, Web browsing and for other purposes.

In 2001, NTT East and NTT West launched "*B FLET'S*," a high-speed, large-capacity communications service using optical fiber. In terms of changes in customer needs, customers began seeking faster and more interactive broadband services, as well as ubiquitous services that allow them to connect with anything they choose at any time or place, through seamless fixed-line and mobile communications technology. This led to the full-scale penetration of fiber-optic access services and the migration to 3G mobile phones.

In 2004, NTT Group implemented its Medium-term Management Strategy aimed at spurring the development of reliable, secure and convenient broadband and ubiquitous services. Based on this strategy, NTT Group enhanced fiber-optic services, while building and commercially launching the world's first Next-Generation Network (NGN), which combines the reliability and stability of existing public telephone networks with the flexibility and economy of the Internet. As a result, NTT Group helped to realize the world's fastest and most economical broadband environment in Japan.

In its 2008 follow-on, NTT unveiled a new Medium-term Management Strategy called "Road to Service Creation Business Group," eyeing the completion of full-IP network infrastructure for fixed-line and mobile communications planned for 2010 and afterward. Guided by this strategy, NTT Group will work to create and fully expand new broadband and ubiquitous services such as video services, while shifting to a business portfolio centered on IP business, and other new businesses. The overriding goal is to achieve further advancement in the broadband and ubiquitous society.

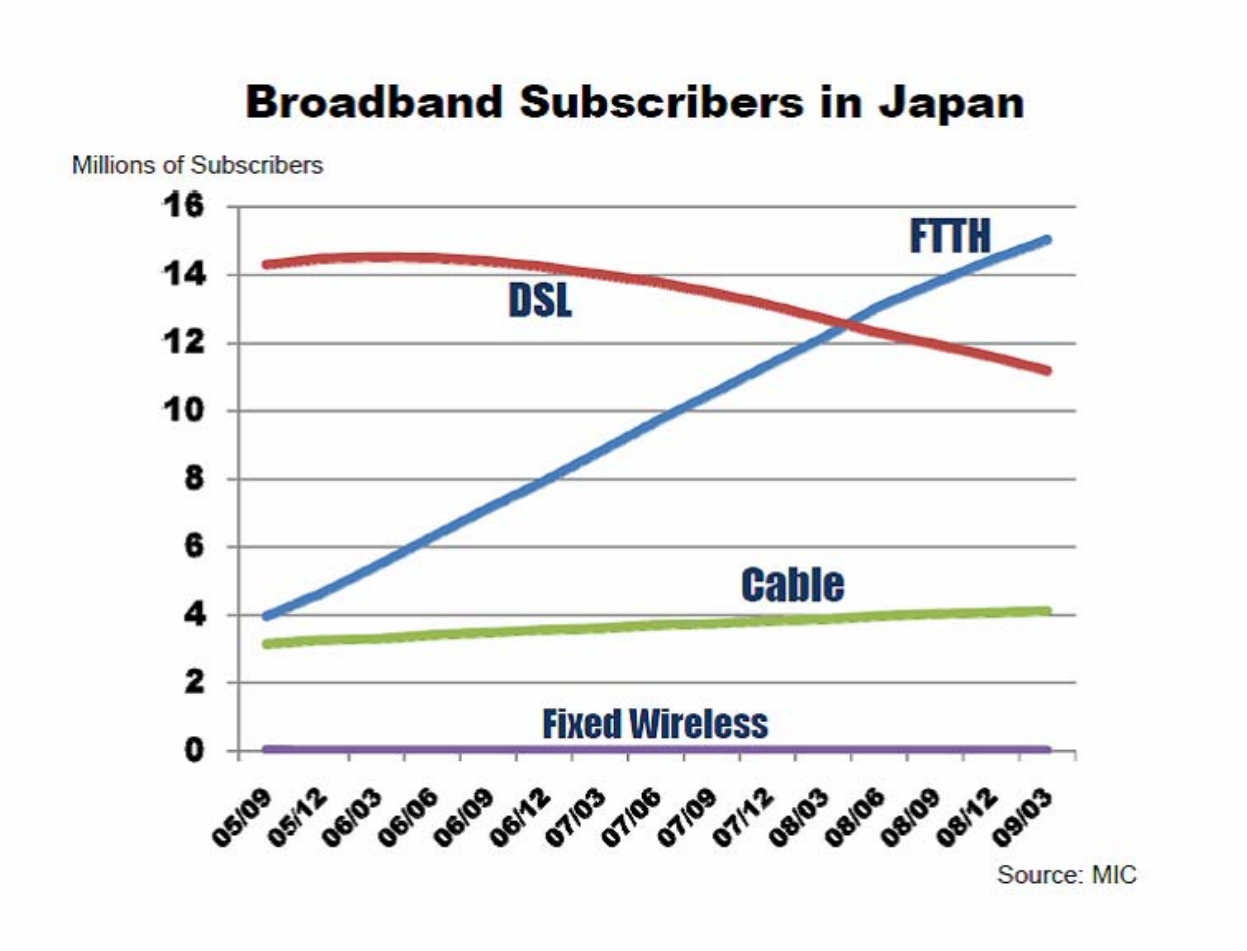
NTT takes no position on the broadband policy most appropriate for the United States. However, consistent with the request made by the FCC for comments on the Berkman Center's draft study, NTT provides the following comments regarding the draft study's discussion regarding Japan. As explained below, the Berkman Center's draft study is seriously in error regarding numerous aspects of the history and current status of the Japanese broadband marketplace. Although there are numerous errors and internal inconsistencies in the draft – errors that easily could have been avoided had NTT been interviewed by the draft study's authors – NTT will focus on only a few illustrative examples.

First, facilities based competition, not unbundling, has been the key spur to broadband growth in Japan. Though the report variously emphasizes the role of unbundling in broadband growth in Japan,[4] the causal connection applies only to copper DSL (if at all). During 2008, fiber to the home ("FTTH") surpassed DSL as the principle delivery technology for fixed broadband access in Japan—as of mid 2009, FTTH accounted for 16 million subscribers, as compared with 11 million subscribers using DSL and 4 million cable broadband subscribers, as shown in Figure 1.[5]

[4] Berkman Center draft study at 84, 85 & 192.

[5] The Berkman Center draft study acknowledges that FTTH overtook DSL at page 192.

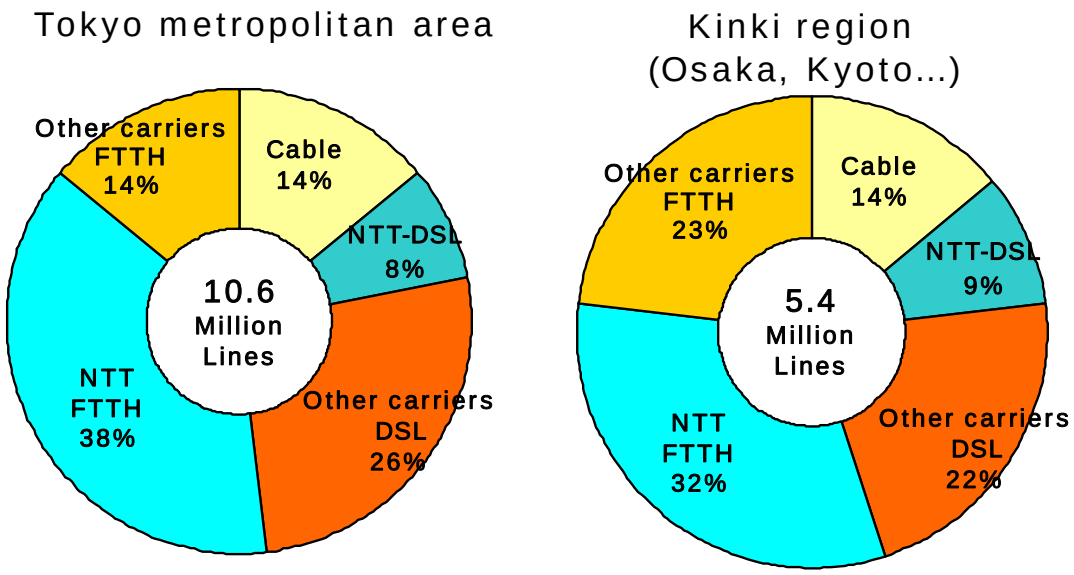
FIGURE 1



As shown in Figure 2, NTT is only one of many carriers supplying broadband connectivity in Japan's two largest urban areas:

FIGURE 2

Market Shares of Broadband Services in Japan



Source: MIC and NTT survey (March 31, 2009)

Importantly, and contrary to the Berkman Center draft study, the success of Japanese FTTH isn't due to an "unbundled" network[6] or dependant on "open access"[7]— rather, its growth was driven by "facilities-based IP competition" between vigorous providers,[8] including NTT, K-Opti.com (a subsidiary of the large Kansai Electric Power Company) and STNet (a subsidiary of Shikoku Electric Power Company), as well as many cable television companies. Those broadband providers use almost exclusively fiber that they build, own and operate.[9] So the draft study is incorrect in stating that Japanese fiber regulation "is conceptually similar" to the U.K.'s

6 Berkman Center draft study at 192.

7 Berkman Center draft study at 196.

8 Berkman Center draft study at 192.

9 The only "unbundling and interconnection" (Berkman Center draft study at 192) of FTTH required by Japanese regulations is the right to lease dark fiber at "future cost" pricing.

structural separation.[10] In fact, the fiber leased to competitive carriers – which includes leases other than for FTTH service – amount to less than 10 percent of NTT's own fiber network.[11] Indeed, elsewhere the Berkman Center draft study acknowledges that "[i]t does not appear to be the case that fiber unbundling was an important factor for entrants in fiber."[12]

Second, the report misstates the importance of "government-subsidized loans"[13] to the success of broadband deployment in Japan. The "low cost loans from the government" actually borrowed by NTT amount to less than 3 percent of NTT's own investment in fiber and, in any case, ended after fiscal year 2006 (see Figure 3). FTTH construction in Japan is almost entirely the product of private sector initiative and investment.

There were periods when interest rates on the "low cost loans from the government" were higher than the market rates (and thus irrelevant). In any event, during the period when NTT borrowed "low cost loans from the government," the difference between the interest rates of such loans and commercial rates averaged only approximately 0.2 percent. Therefore, contrary to the draft study, the role played by "government-subsidized loans" in Japanese infrastructure development was minimal.

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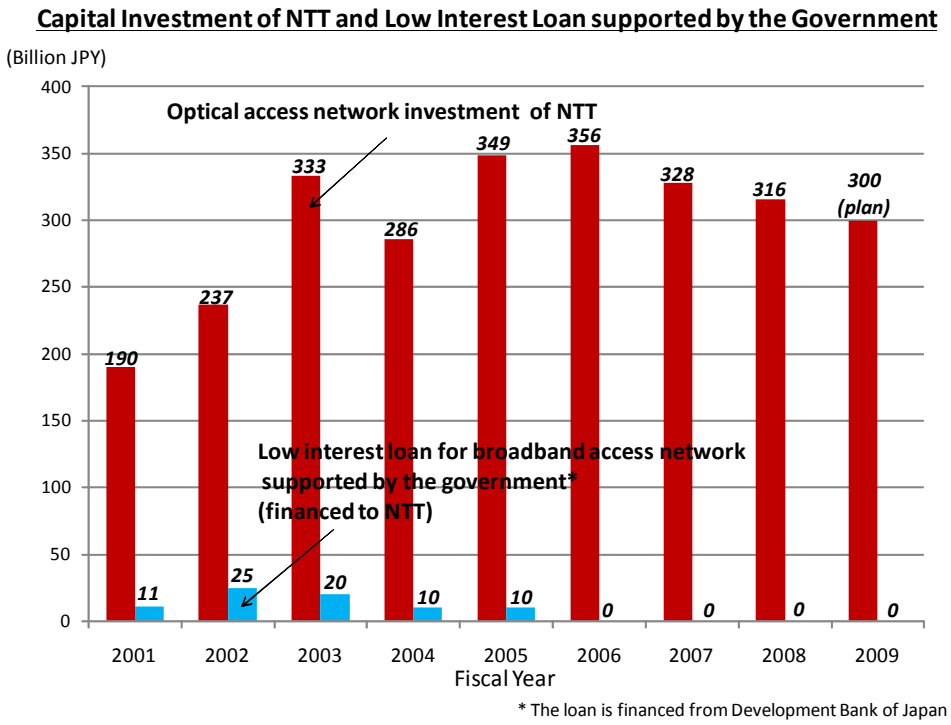
[10] Berkman Center draft study at 86.

[11] The Berkman Center draft study at 85 "questions the argument that open access deters investment." The fact that open access has not deterred FTTH investment should be understood in light of the economics associated with "open access" and the resulting low rate of dark fiber leases. Therefore, it would be erroneous to presume that FTTH unbundling would not negatively impact private sector fiber investment. The potential impact on the incentive for investment is the reason that NTT continues to oppose FTTH unbundling.

[12] Berkman Center draft study at 87.

[13] Berkman Center draft study at 85.

FIGURE 3



Indeed, as the World Bank recently tabulated,[14] the Japanese government has committed far less to stimulating broadband per capita than the United States, and the Japanese government's total planned broadband investment amounts are relatively small (see Figure 4). The Japanese government also has provided some additional "grants-in-aid" to promote local telecommunications infrastructure, but this funding focuses on the last approximately 1 percent of unserved areas not yet reached by any broadband network.[15]

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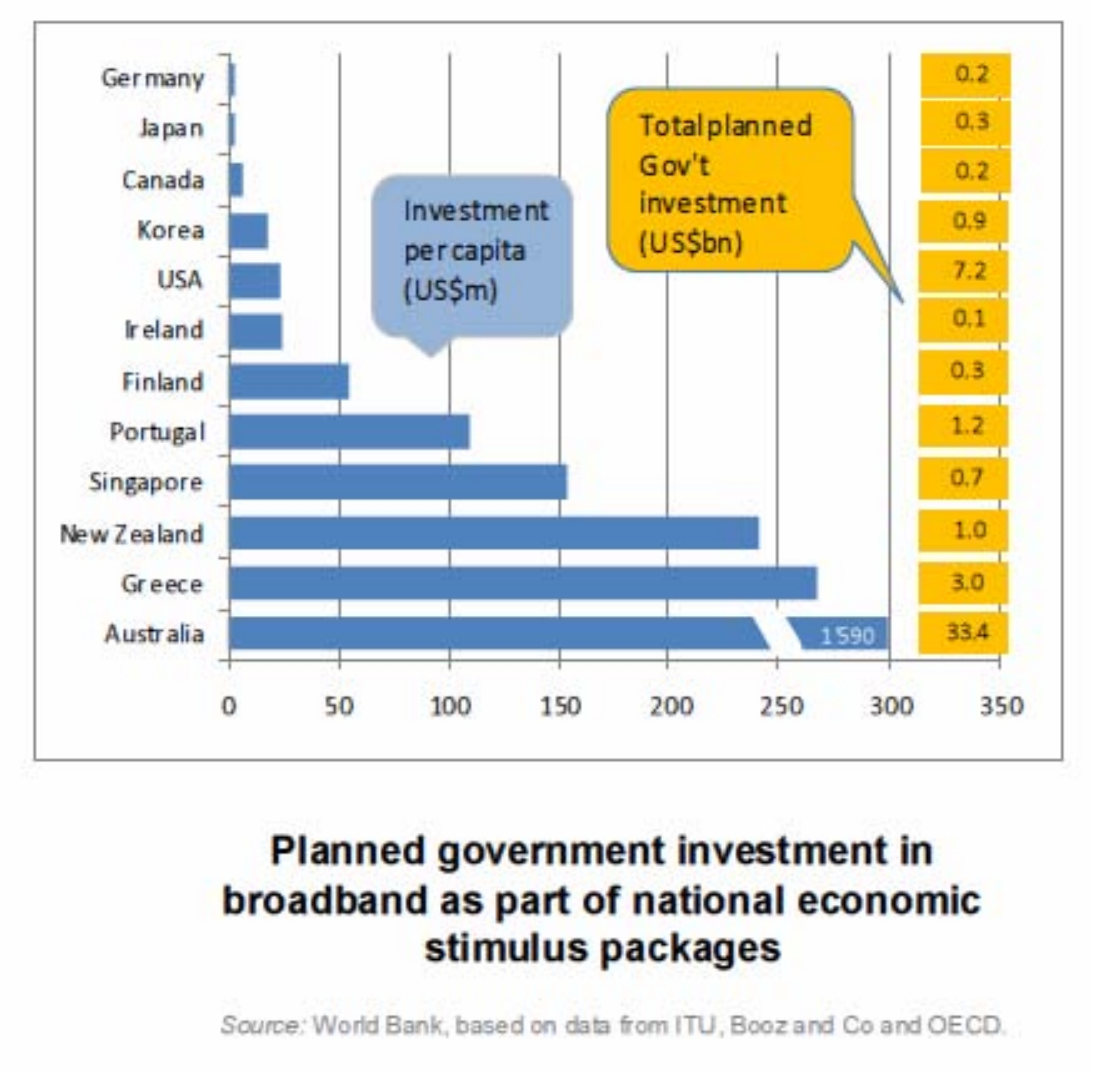
[14] Tim Kelly, *Role of Government in Broadband Development,* at 12, OECD/*Info*Dev workshop on "Policy Coherence in ICT4D" at 12 (Sept. 11, 2009), *available at* http://www.oecd.org/dataoecd/31/61/43760084.pdf (last visited Oct. 30, 2009).

[15] *See* MIC, 2009 White Paper "Information and Communications in Japan," at 70 (July 10, 2009), *available at* http://www.soumu.go.jp/johotsusintokei/whitepaper/eng/WP2009/chapter-5.pdf (last visited Oct. 30, 2009).

FIGURE 4



Third, the Berkman Center's draft study is internally contradictory. For example, the Berkman's Center's draft study sometimes stresses the role of fiber unbundling or open access in Japan,[16] yet elsewhere is "skeptical" of such a causal connection[17] in favor of a "more ambiguous" and "nuanced" explanation[18] founded on "facilities-based IP competition from

[16] *E.g.*, Berkman Center draft study at 84, 85 & 192.

[17] Berkman Center draft study at 84.

[18] Berkman Center draft study at 85.

utility company subsidiaries."[19] The latter is correct; the former is incorrect; and the many statements difficult to reconcile.

In sum, the review of broadband facilities and regulation in Japan contained in the Berkman Center draft study is both factually incorrect and internally inconsistent. Vigorous facilities-based competition among FTTH providers led by NTT's forward-looking entrepreneurial endeavors to create FTTH market spurred the growth of broadband in Japan, which is among the cheapest and the fastest in the world.[20] As the draft study appropriately recognizes, Japanese broadband regulation is "nuanced" and Japan's success is not primarily a result of either unbundling or government subsidies. In view of the ever-changing technologies and new business models in the broadband industry, NTT believes that regulation founded on static analysis or designed for previous-generation networks would have adverse effect on future broadband innovation and growth.

Respectfully submitted,

Nippon Telegraph & Telephone Corporation

By:
/s/ Satoshi Miura
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Satoshi Miura
President and CEO

Dated: November 16, 2009

[19] Berkman Center draft study at 192.

[20] *See* Berkman Center draft study at 191.